

ABSTRACT OF THE DISCLOSURE

This invention provides a watermark information embedding apparatus capable of improving information recording density dramatically by expressing the information with a simple line or dot.

More specifically, this is a watermark information embedding apparatus for embedding information into an image by electronic watermark technology: a coding portion 11 for coding embedding information to be embedded into an image; a pattern allocating portion 12 for allocating a pattern to each symbol of the coded embedding information; and a watermark embedded image synthesizing portion 13 for disposing the pattern corresponding to the embedding information on the image regularly and one or more patterns having a predetermined spatial frequency are allocated to each symbol. As a consequence, the information recording density can be improved dramatically by expressing information with a simple line or dot.